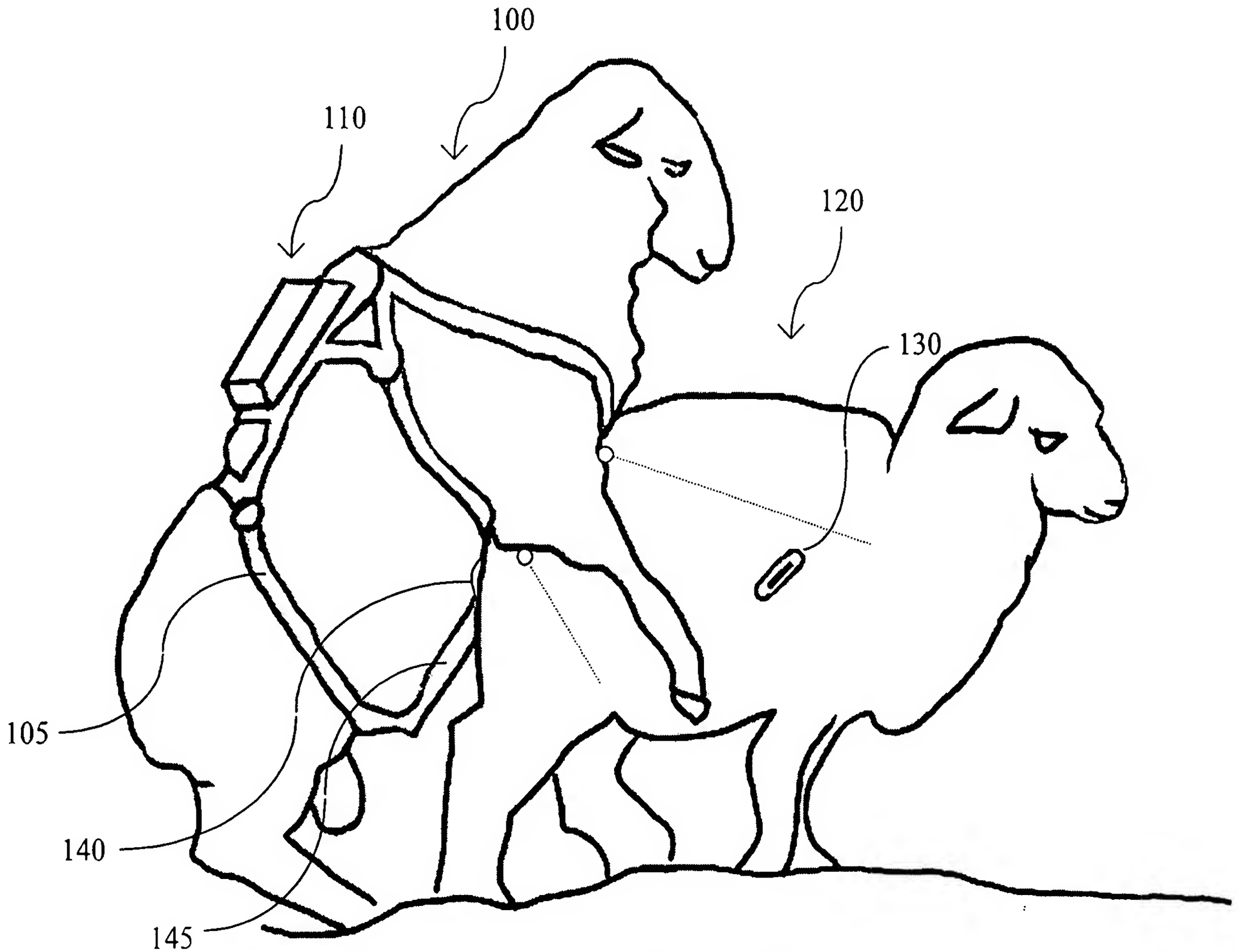

Figure 1A

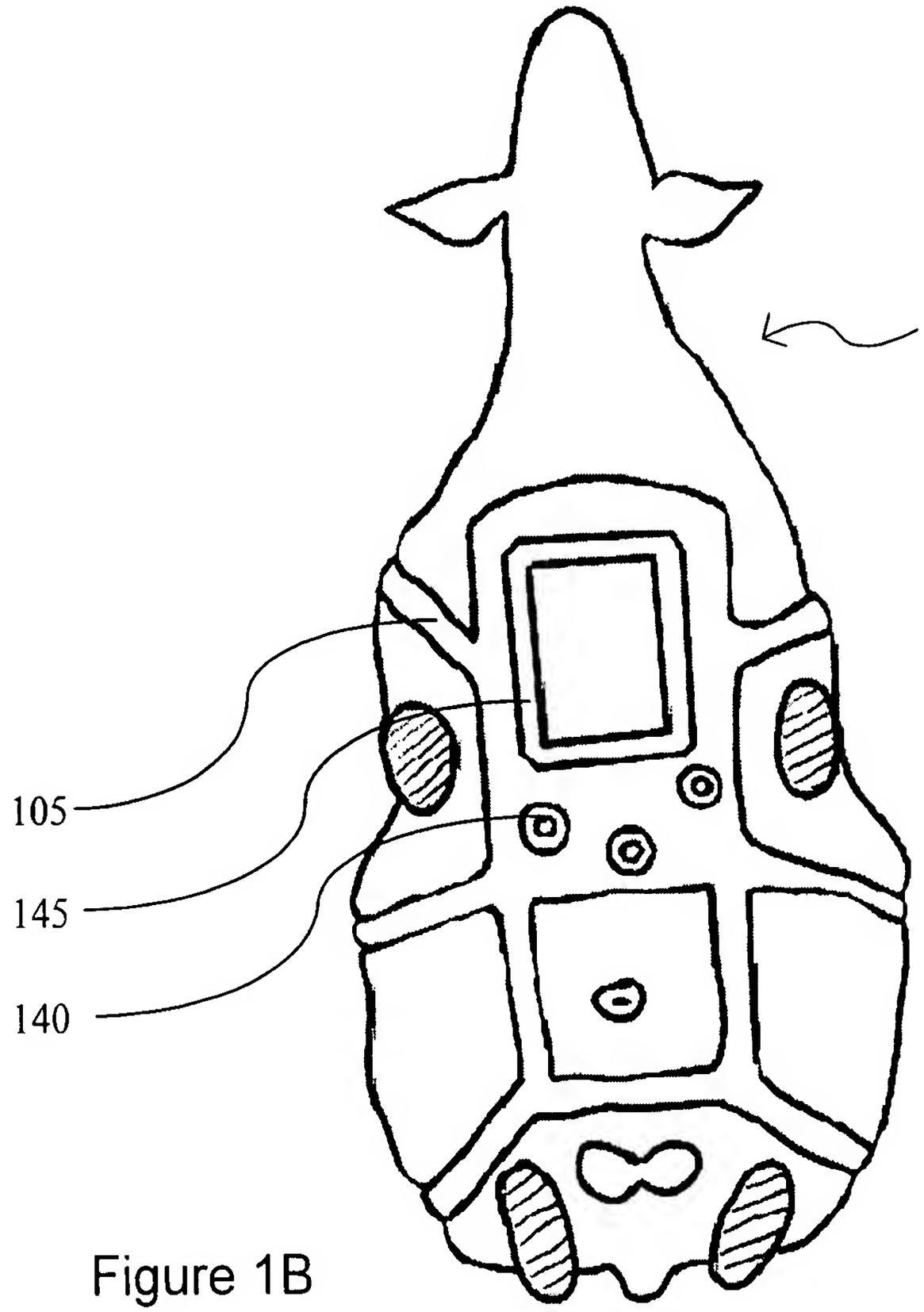

Figure 1B

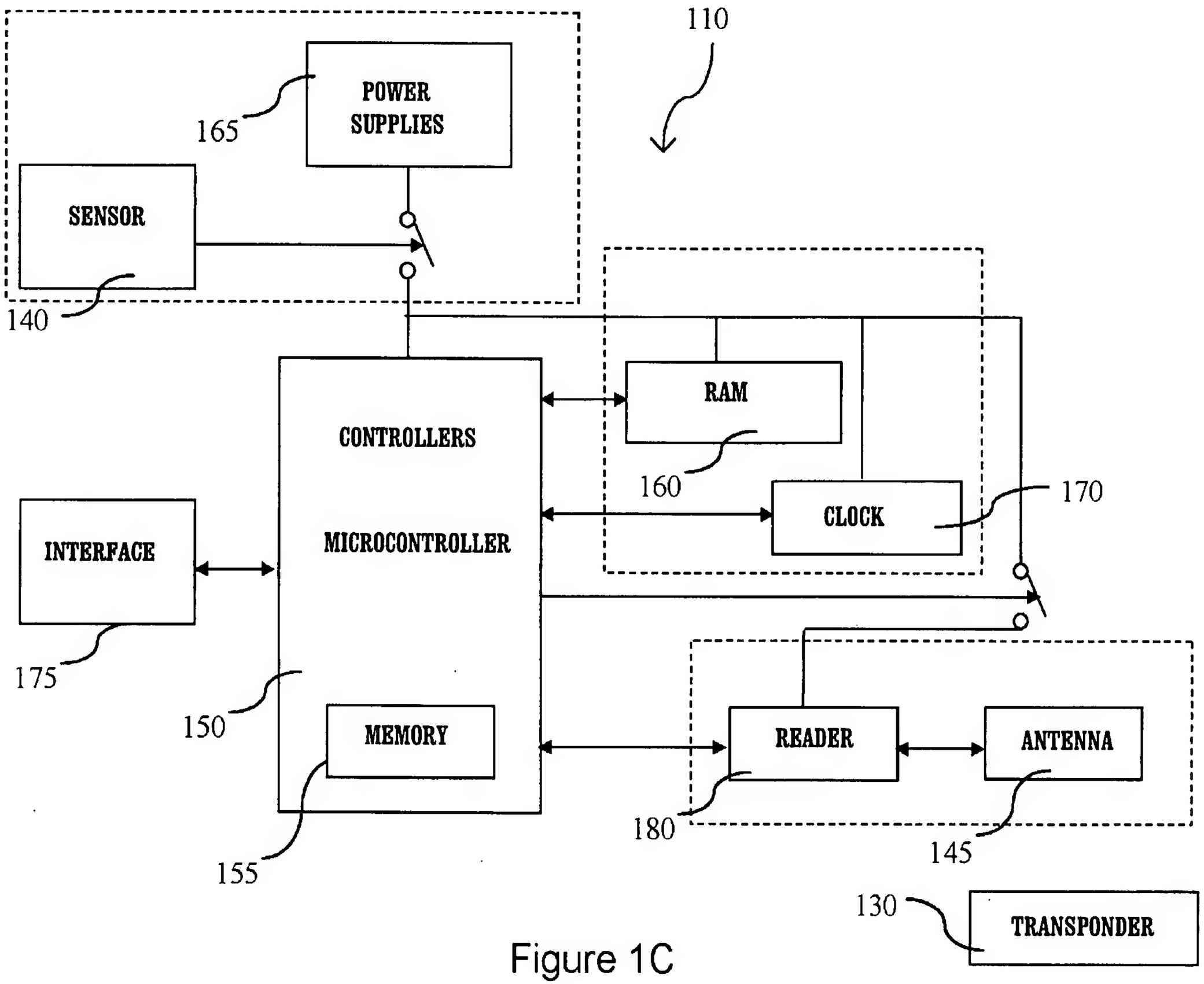
110
165
POWER SUPPLIES
SENSOR
140
CONTROLLERS
RAM
160
CLOCK
170
INTERFACE
MICROCONTROLLER
175
150
MEMORY
155
READER
ANTENNA
180
145
130
TRANSPONDER

Figure 1C

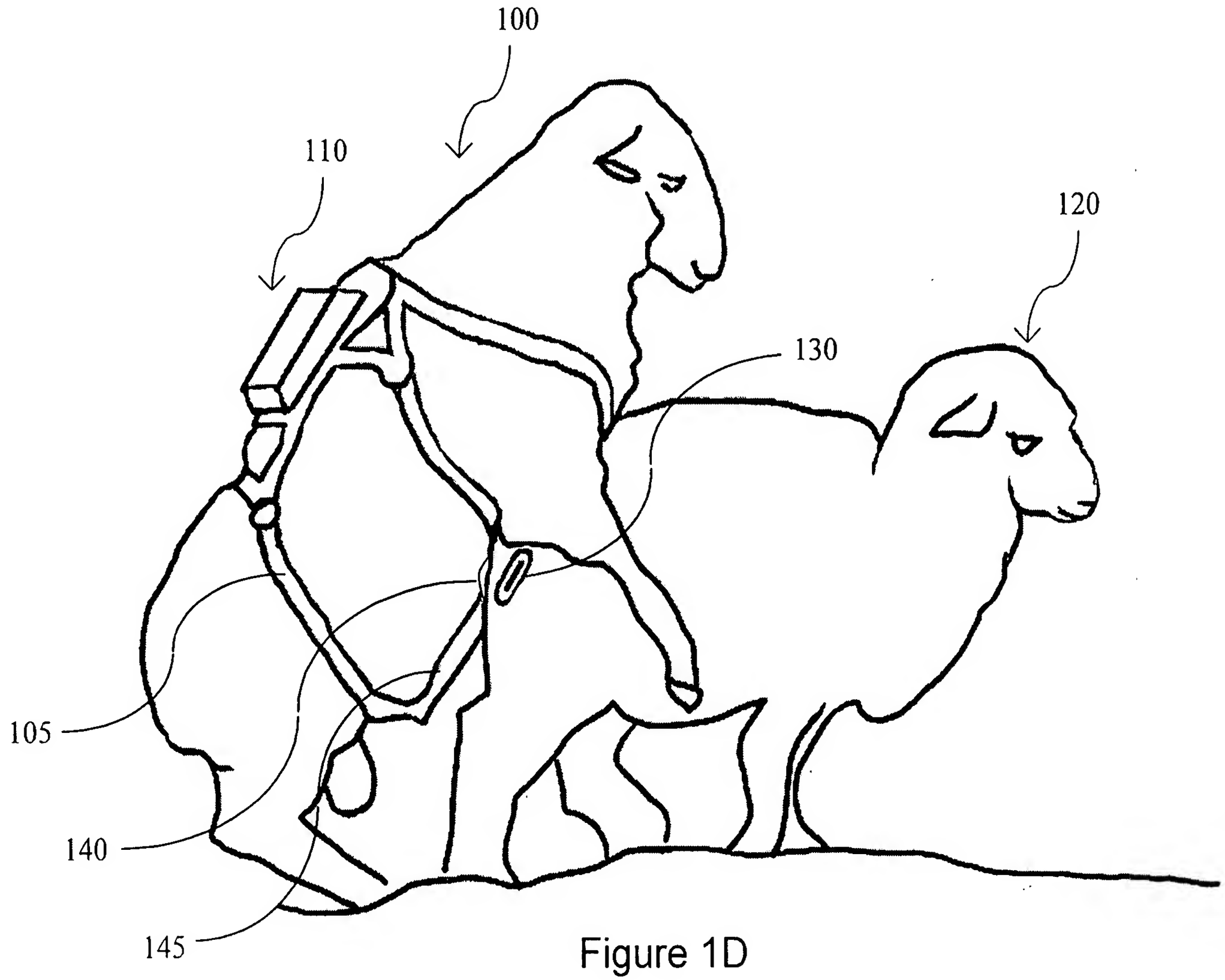

Figure 1D

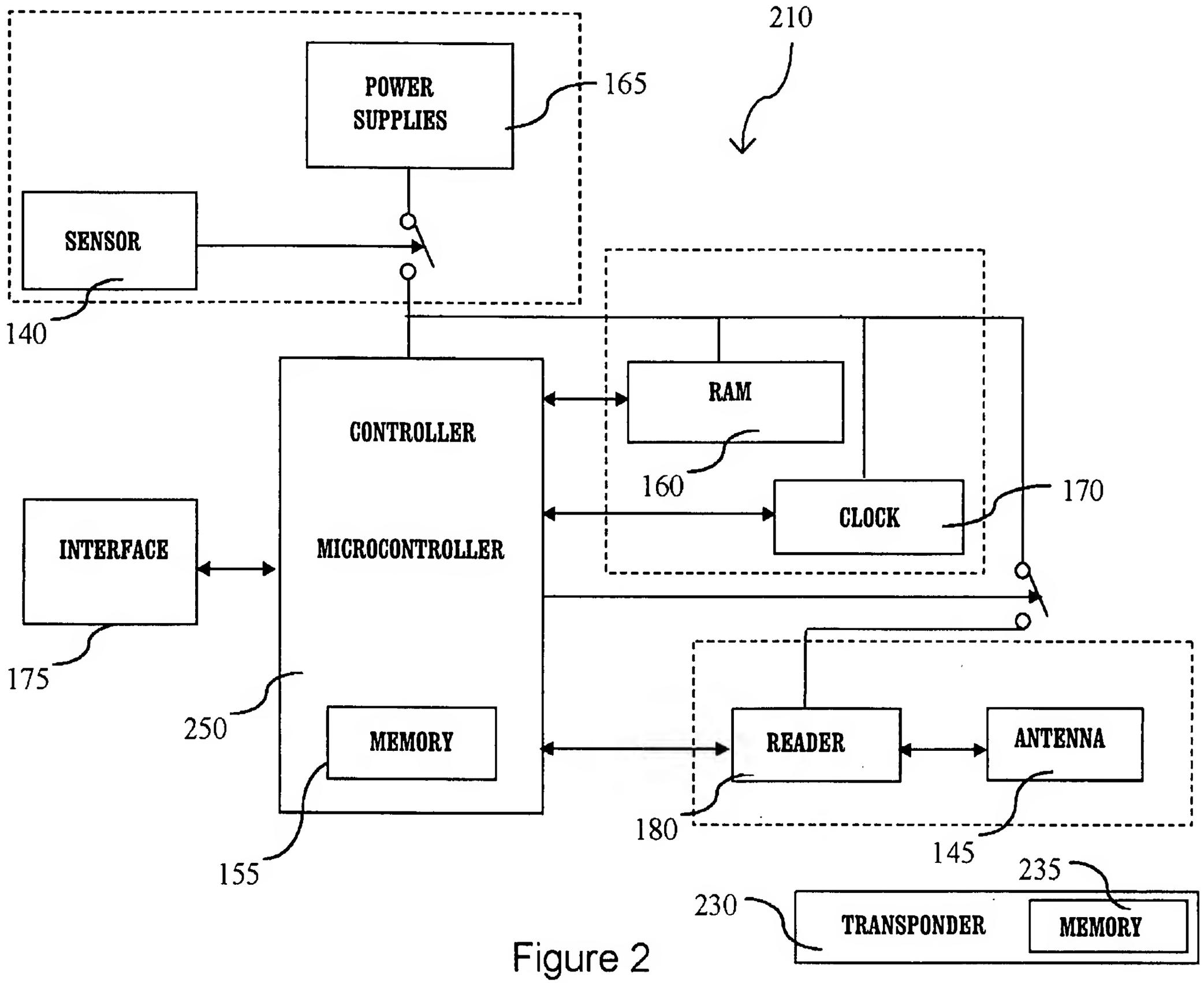
210
POWER SUPPLIES
165
SENSOR
140
CONTROLLER
MICROCONTROLLER
RAM
160
CLOCK
170
INTERFACE
175
250
MEMORY
155
READER
ANTENNA
180
145
235
230
TRANSPONDER
MEMORY

Figure 2

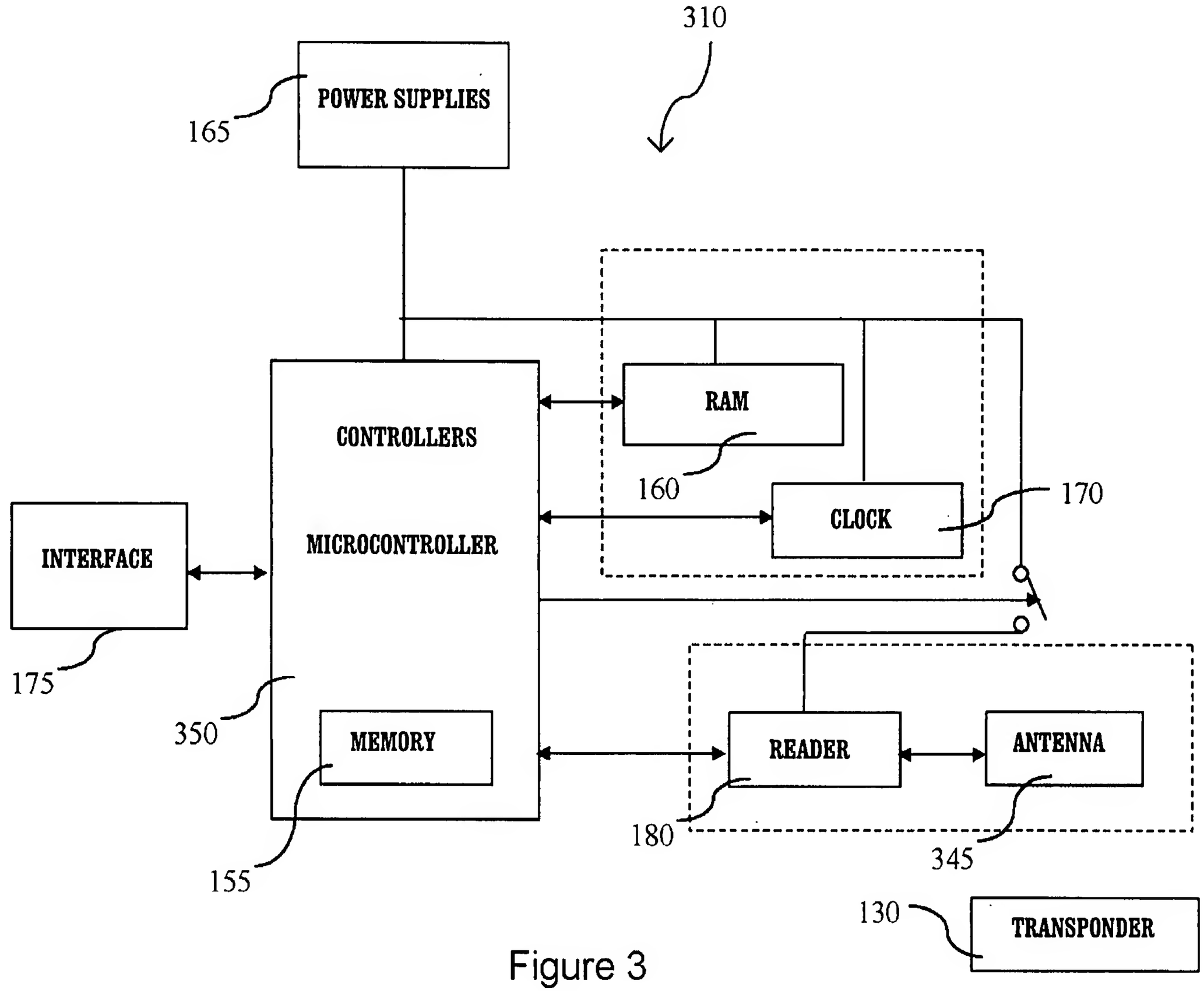
310
165
POWER SUPPLIES
RAM
CONTROLLERS
160
CLOCK
170
INTERFACE
MICROCONTROLLER
175
350
MEMORY
READER
ANTENNA
180
345
155
130
TRANSPONDER

Figure 3

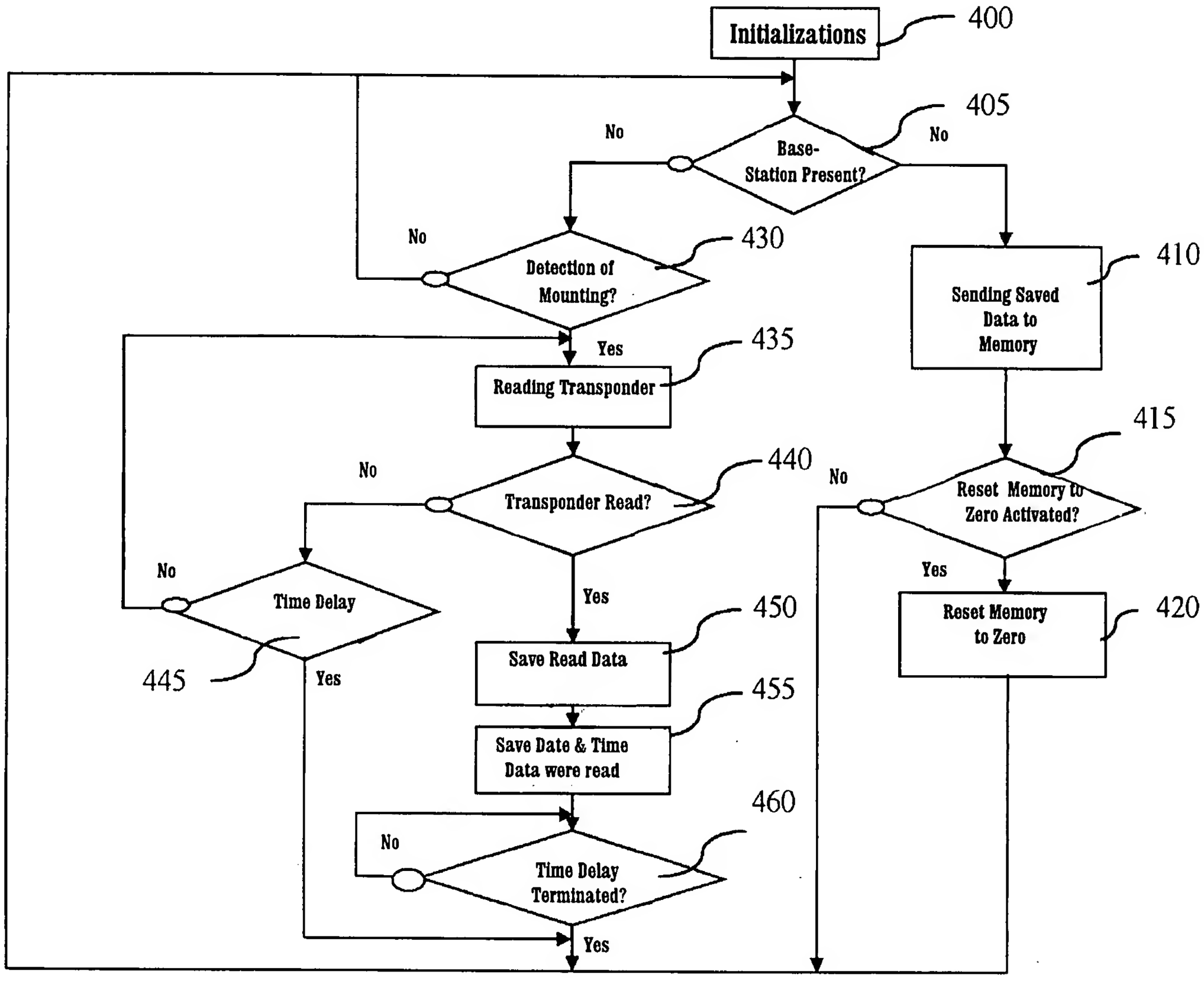
Initializations
400
405
Base-Station Present?
No
No
Detection of Mounting?
430
No
Yes
Reading Transponder
435
Sending Saved Data to Memory
410
415
Reset Memory to Zero Activated?
No
Yes
Reset Memory to Zero
420
440
Transponder Read?
No
Yes
450
Save Read Data
455
Save Date & Time Data were read
460
Time Delay Terminated?
No
Yes
Time Delay
No
445
Yes

Figure 4

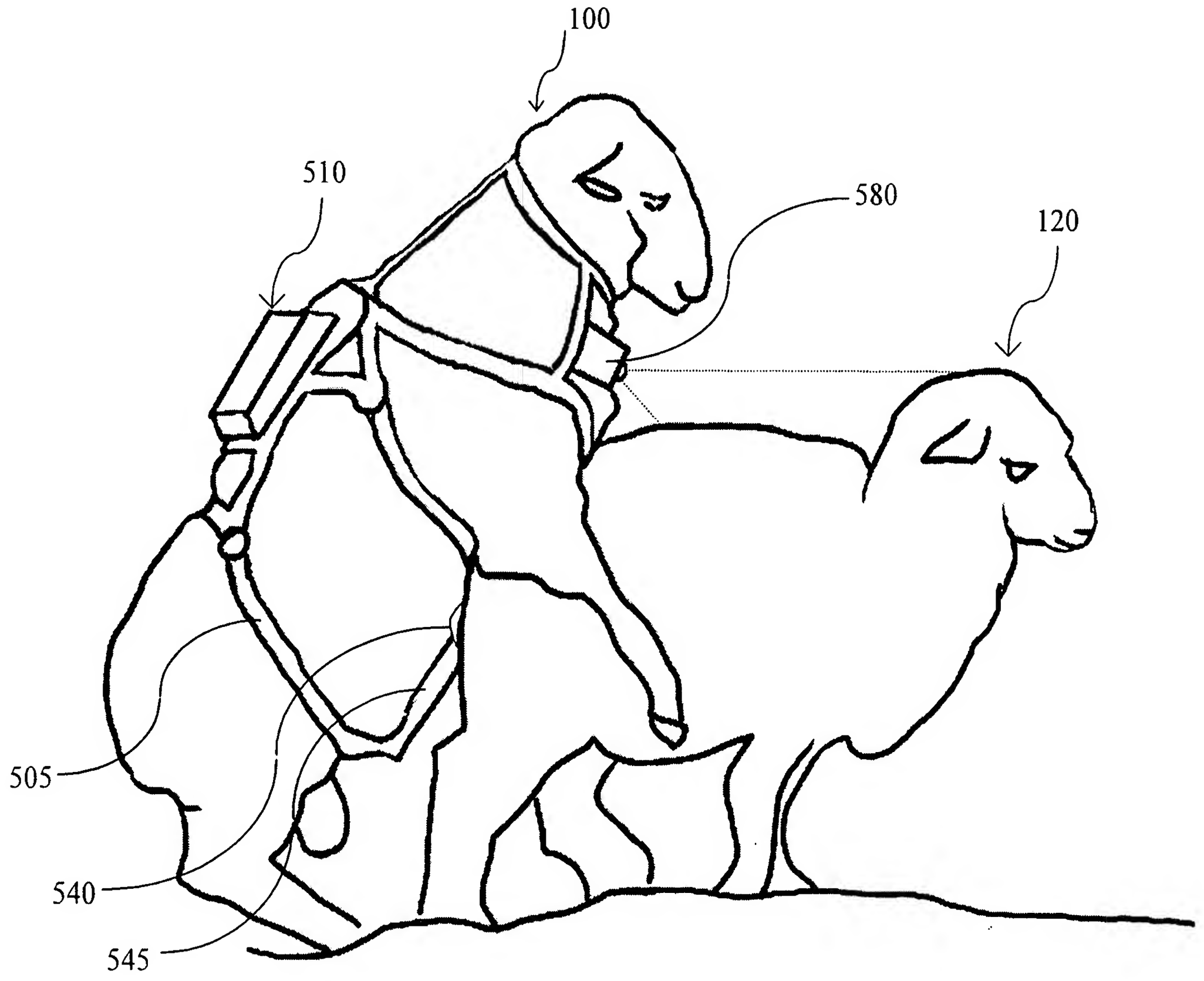

Figure 5

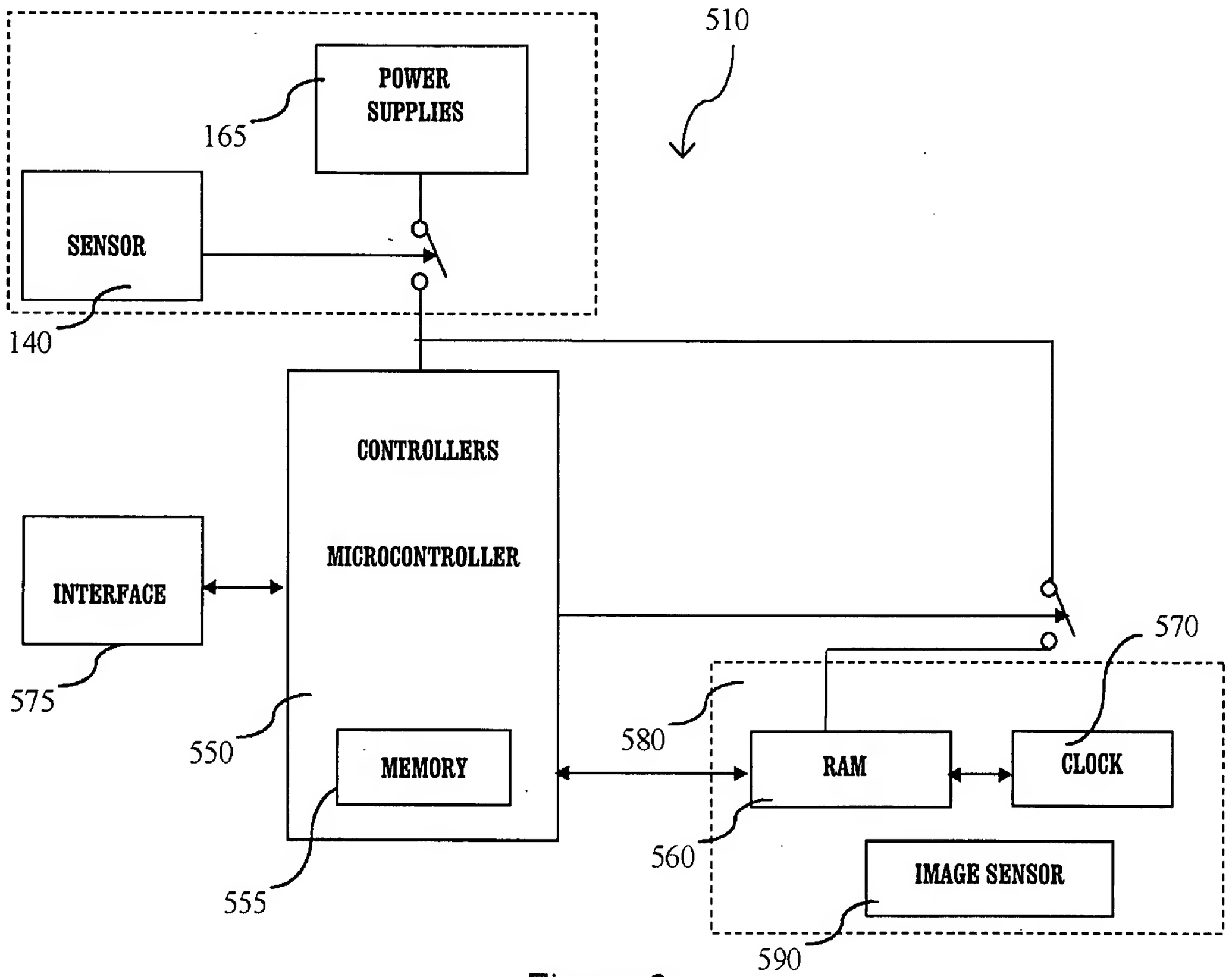
510
POWER SUPPLIES
165
SENSOR
140
CONTROLLERS
MICROCONTROLLER
INTERFACE
575
550
MEMORY
555
580
RAM
CLOCK
570
560
IMAGE SENSOR
590

Figure 6

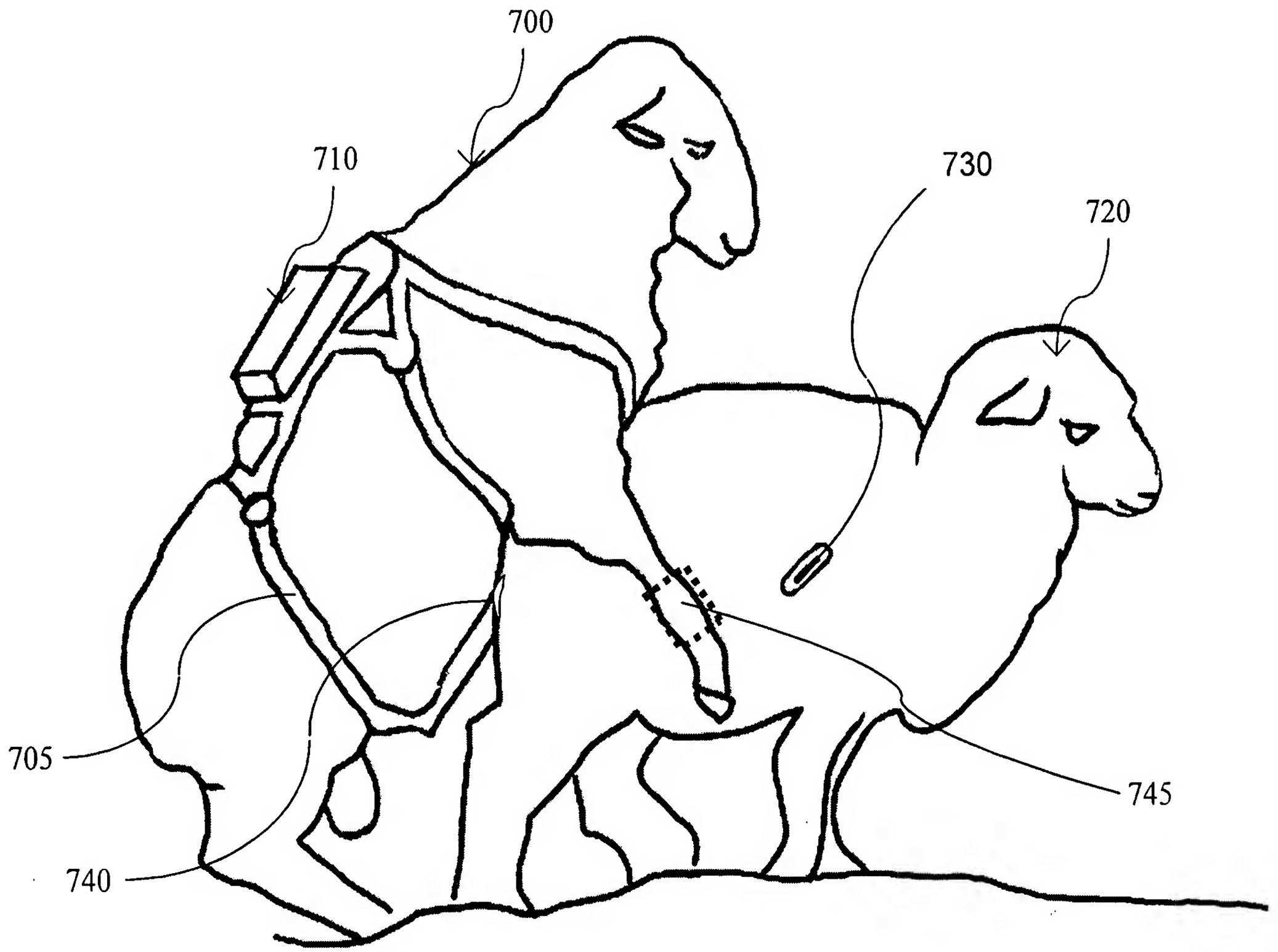

Figure 7

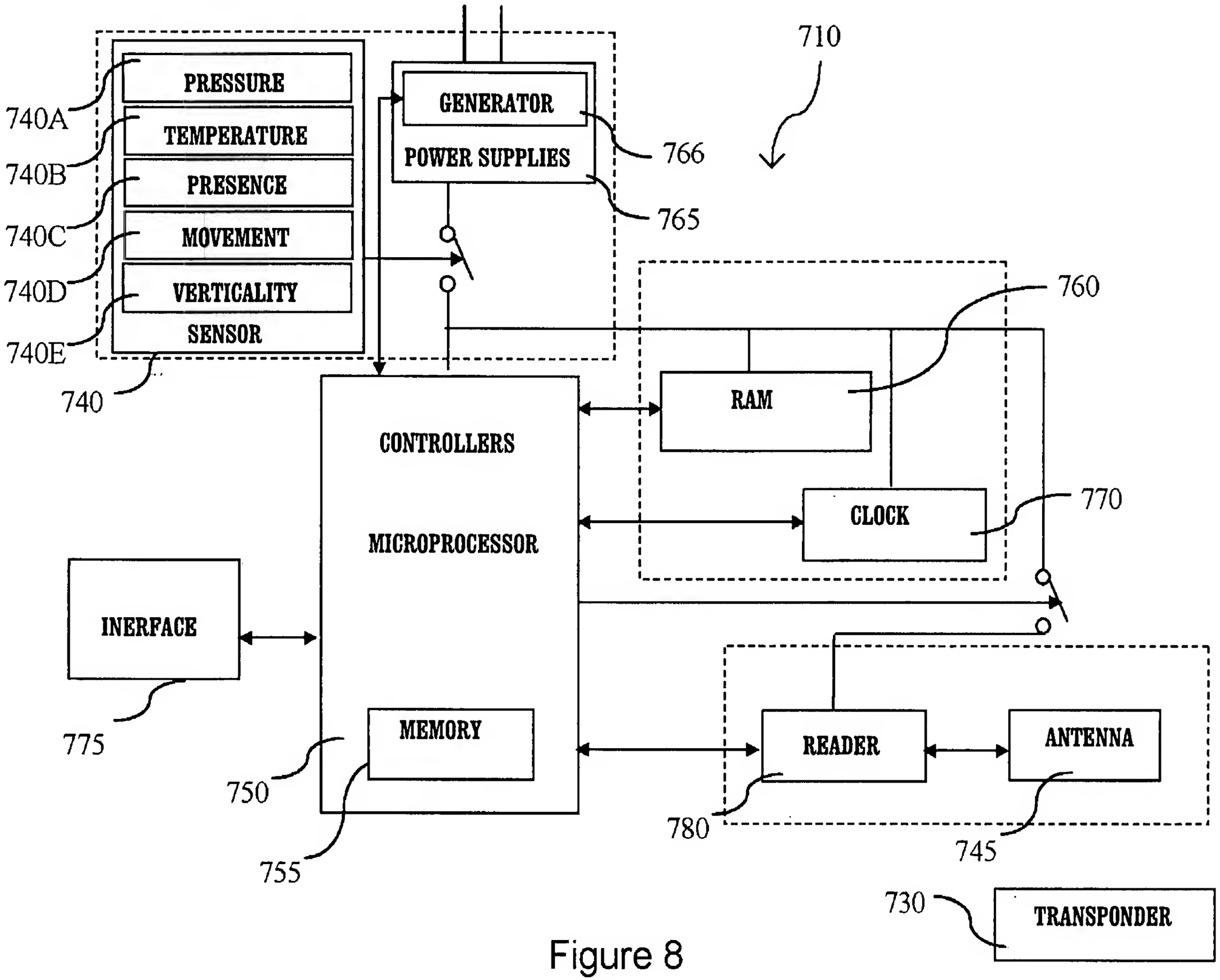
710
PRESSURE
740A
TEMPERATURE
740B
PRESENCE
740C
MOVEMENT
740D
VERTICALITY
740E
SENSOR
740
GENERATOR
766
POWER SUPPLIES
765
760
RAM
CONTROLLERS
MICROPROCESSOR
CLOCK
770
INERFACE
775
MEMORY
750
755
READER
780
ANTENNA
745
730
TRANSPONDER

Figure 8

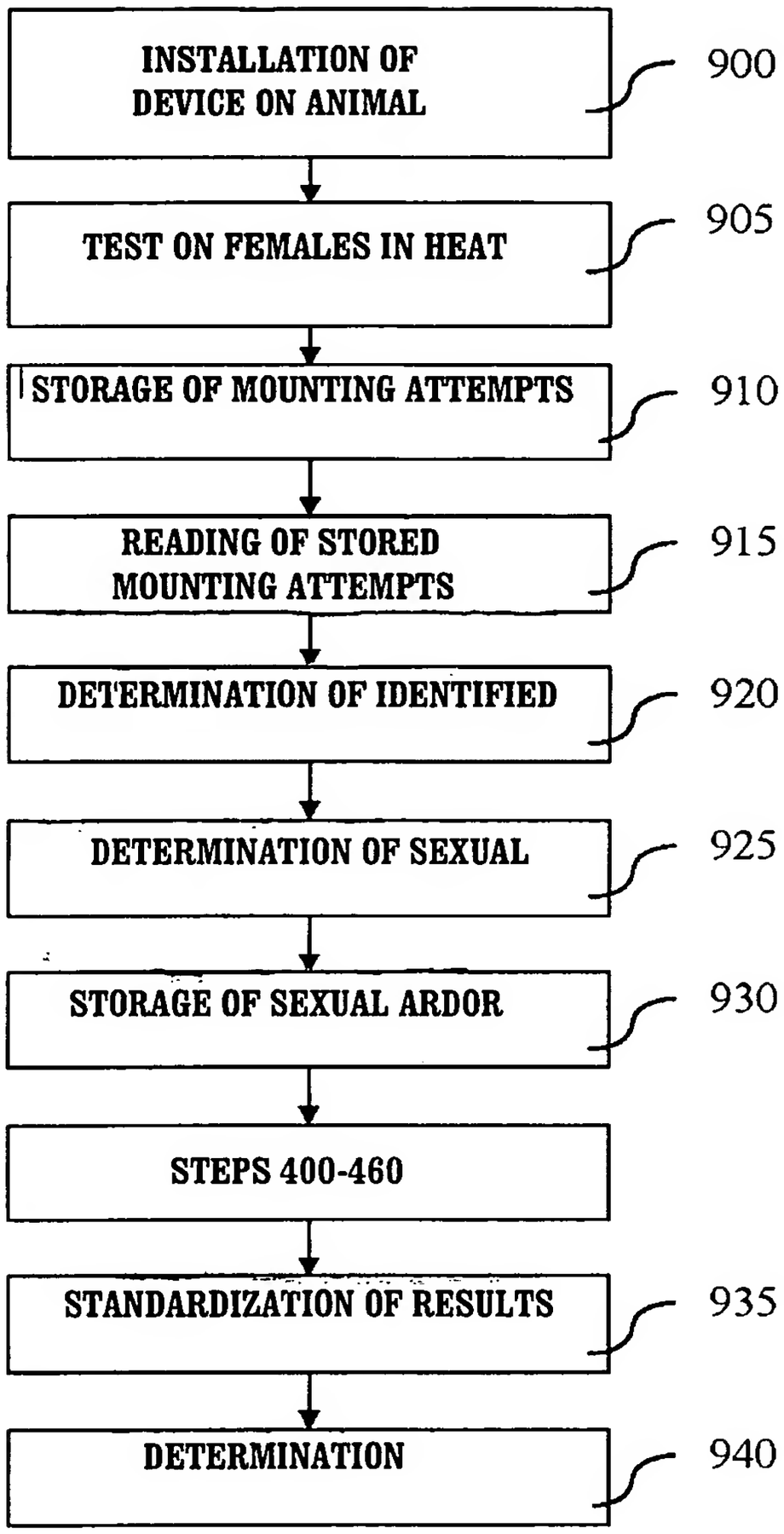
INSTALLATION OF DEVICE ON ANIMAL
900
TEST ON FEMALES IN HEAT
905
STORAGE OF MOUNTING ATTEMPTS
910
READING OF STORED MOUNTING ATTEMPTS
915
DETERMINATION OF IDENTIFIED
920
DETERMINATION OF SEXUAL
925
STORAGE OF SEXUAL ARDOR
930
STEPS 400-460
STANDARDIZATION OF RESULTS
935
DETERMINATION
940

Figure 9